Environmental Research

Section A

Volume 83, 2000

Academic Press

Copyright © 2000 by Academic Press

All rights reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the Publisher. *Exceptions:* Explicit permission from Academic Press is not required to reproduce a maximum of two figures or tables from an Academic Press article in another scientific or research publication provided that the material has not been credited to another source and that full credit to the Academic Press article is given. In addition, authors of work contained herein need not obtain permission in the following cases only: (1) to use their original figures or tables in their future works; (2) to make copies of their papers for use in their classroom teaching; and (3) to include their papers as part of their dissertations.

The appearance of the code at the bottom of the first page of an article in this journal indicates the Publisher's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (222 Rosewood Drive, Danvers, Massachusetts 01923), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-2000 articles are the same as those for current articles.

0013-9351/00 $35.00

MADE IN THE UNITED STATES OF AMERICA

This journal is printed on acid-free paper.

♾

Contents of Volume 83

Number 1, May 2000

REVIEW ARTICLE

1 **How Lead Exposure Relates to Temporal Changes in IQ, Violent Crime, and Unwed Pregnancy**
Rick Nevin

EPIDEMIOLOGY STUDIES

23 **Male and Female Rate Differences in Carpal Tunnel Syndrome Injuries: Personal Attributes or Job Tasks?**
Melissa McDiarmid, Marc Oliver, John Ruser, and Pat Gucer

33 **Female Lung Cancer Mortality and Sex Ratios at Birth near a Petroleum Refinery Plant**
Chun-Yuh Yang, Bi-Hua Cheng, Te-Yao Hsu, Shang-Shyue Tsai, Chung-Feng Hung, and Trong-Neng Wu

41 **Semi-occupational Exposure to Lead: A Case Study of Child and Adolescent Street Vendors in Istanbul**
Andrzej Furman and Mehmet Laleli

EXPOSURE ASSESSMENT

46 **Decrease of PCDD/F Levels in Human Blood—Trend Analysis for the German Population, 1991–1996**
Jürgen Wittsiepe, Petra Schrey, Ulrich Ewers, Michael Wilhelm, and Fidelis Selenka

54 **Accumulation of Cadmium, Zinc, and Copper in Maternal Blood and Developmental Placental Tissue: Differences between Finland, Estonia, and St. Petersburg**
M. Kantola, R. Purkunen, P. Kröger, A. Tooming, J. Juravskaja, M. Pasanen, S. Saarikoski, and T. Vartiainen

67 **A Model for Predicting the Frequency of High Pesticide Exposure Events in the Agricultural Health Study**
David T. Mage, Michael C. R. Alavanja, Dale P. Sandler, Cheryl J. McDonnell, Burt Kross, Andrew Rowland, and Aaron Blair

ECOTOXICOLOGY STUDIES

72 **The Effects of Chlorothalonil on Oyster Hemocyte Activation: Phagocytosis, Reduced Pyridine Nucleotides, and Reactive Oxygen Species Production**
Cal Baier-Anderson and Robert S. Anderson

79 *ANNOUNCEMENT*

82 *PAPERS TO APPEAR IN ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY (ENVIRONMENTAL RESEARCH SECTION B)*

54 500HI XL 3534
11/00 31249-200 NULB

Number 2, June 2000

Mercury as a Global Pollutant: 5th International Conference
Rio de Janeiro, Brazil, May 23–28

*SPECIAL ISSUE ARTICLES**

EPIDEMIOLOGY STUDIES

83 **Health Surveillance in the Population Living in a Methyl Mercury-Polluted Area over a Long Period**
Makoto Futatsuka, Takao Kitano, Masahiro Shono, Yoshiharu Fukuda, Kayo Ushijima, Tsukasa Inaoka, Megumi Nagano, Junji Wakamiya, and Kenjiro Miyamoto

TOXICOLOGY STUDIES

93 **Mercury Distribution in the Neonatal and Adult Cerebellum after Mercury Vapor Exposure of Pregnant Squirrel Monkeys**
Karin Warfvinge

102 **Mercury Distribution in the Squirrel Monkey Retina after *in Utero* Exposure to Mercury Vapor**
Karin Warfvinge and Anitha Bruun

EXPOSURE ASSESSMENT

110 **A Program for the Control of Indoor Pollution by Metallic Mercury**
Volney de M. Câmara, Lydia Maria B. Tavares, Maria Izabel de F. Filhote, Olaf Malm, and Maurício de A. Perez

117 **Mercury Contamination in Fish from Santarém, Pará, Brazil**
Ana Paula de Souza Lima, Regina Celi Sarkis Müller, Jorge Eduardo de Souza Sarkis, Cláudio Nahum Alves, Maria Helena da Silva Bentes, Edilson Brabo, and Elisabeth de Oliveira Santos

CLINICAL TOXICOLOGY

123 **Mercury Intolerance in Relation to Superoxide Dismutase, Glutathione Peroxidase, Catalase, and the Nitroblue Tetrazolium Responses**
J. A. Marcusson, B. Carlmark, and C. Jarstrand

ENVIRONMENTAL BIOGEOCHEMISTRY

129 **Mercury Biogeochemistry in the Idrija River, Slovenia, from above the Mine into the Gulf of Trieste**
Mark E. Hines, Milena Horvat, Jadran Faganeli, Jean-Claude J. Bonzongo, Tamar Barkay, Elaine B. Major, Karen J. Scott, Elizabeth A. Bailey, John J. Warwick, and W. Berry Lyons

***Other papers from this symposium will appear in future issues.**

REGULAR ARTICLES

EPIDEMIOLOGY STUDIES

140 **Gender Differences in Meal Patterns: Role of Self-Caught Fish and Wild Game in Meat and Fish Diets**
Joanna Burger

EXPOSURE ASSESSMENT

150 **Linear Regression Models of Methyl Mercury Exposure during Prenatal and Early Postnatal Life among Riverside People along the Upper Madeira River, Amazon**
Ana Amelia Peixoto Boischio and Diane S. Henshel

162 **An Evaluation of Employee Exposure to Volatile Organic Compounds in Three Photocopy Centers**
Aleksandr B. Stefaniak, Patrick N. Breysse, Major Phillip M. Murray, Brian C. Rooney, and John Schaefer

174 **A Portable X-Ray Fluorescence Instrument for Analyzing Dust Wipe Samples for Lead: Evaluation with Field Samples**
David A. Sterling, Roger D. Lewis, Douglas A. Luke, and Brooke N. Shadel

180 **Utilization of Breath Analysis for Exposure Estimates of Benzene Associated with Active Smoking**
Wan-Kuen Jo and Ku-Won Pack

188 ***PAPERS TO APPEAR IN ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY (ENVIRONMENTAL RESEARCH, SECTION B)***

Number 3, July 2000

Mercury as a Global Pollutant: 5th International Conference Rio de Janeiro, Brazil, May 23–28

*SPECIAL ISSUE ARTICLES**

EPIDEMIOLOGY STUDIES

275 **Twenty-Seven Years Studying the Human Neurotoxicity of Methylmercury Exposure**
G. J. Myers, P. W. Davidson, C. Cox, C. Shamlaye, E. Cernichiari, and T. W. Clarkson

ECOTOXICOLOGY STUDIES

286 **Comparative Uptake, Bioaccumulation, and Gill Damages of Inorganic Mercury in Tropical and Nordic Freshwater Fish**
C. A. Oliveira Ribeiro, E. Pelletier, W. C. Pfeiffer, and C. Rouleau

REGULAR ARTICLES

293 **PCDDs, PCDFs, PCBs, and Other Organochlorine Compounds in Human Milk from Rio de Janeiro, Brazil**
Francisco J. R. Paumgartten, Cristina M. Cruz, Ibrahim Chahoud, Richard Palavinskas, and Wolfgang Mathar

***Other papers from this symposium have appeared in *Environmental Research*, 83(2) and will appear in future issues.**

RISK ASSESSMENT

298 **Risk Concerns, Land Use, Stewardship, and the Idaho National Engineering and Environmental Laboratory: Attitudes of the Shoshone–Bannock and Other American Indians**
Joanna Burger, Donny E. Roush, Robert Ramos, and Michael Gochfeld

TOXICOLOGY STUDIES

311 **Evaluation of Genotoxic and Cytotoxic Properties of Pesticides Employed in Italian Agricultural Practices**
A. De Marco, R. De Salvia, S. Polani, R. Ricordy, F. Sorrenti, P. Perticone, R. Cozzi, C. D'Ambrosio, C. De Simone, M. Guidotti, T. Albanesi, G. Duranti, F. Festa, G. Gensabella, and M. Owczarek

322 **Exposure of Preschoolers to Lead in the Makati Area of Metro Manila, the Philippines**
Kamala Sharma and Lars Baetz Reutergardh

333 **Environmental Fluoride Content in Tibet**
Cao Jin, Zhao Yan, Liu Jianwei, Xirao Ruodeng, and Danzeng Sangbu

338 **A Community-Based Assessment of Heat-Related Morbidity in North Philadelphia**
Joseph Mattern, Shannon Garrigan, and Stephen B. Kennedy IV

343 ***PAPERS TO APPEAR IN ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY (ENVIRONMENTAL RESEARCH, SECTION B)***